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PORTULACARIA ARMIANA: A NEW *PORTULACARIA* (PORTULACACEAE) FROM SOUTHERN NAMIBIA

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Abstract

A new species of *Portulacaria* (Portulacaceae) from southern Namibia is described.

Uittreksel

PORTULACARIA ARMIANA: 'N NUWE *PORTULACARIA* (PORTULACACEAE) SPECIES VANAF SUIDELIKE NAMIBIË

'n Nuwe *Portulacaria*-species vanaf suidelike Namibië word beskryf.

Key words: *Portulacaria*, sp. nov., Portulacaceae, southern Namibia.

Portulacaria armiana E. J. van Jaarsveld, sp. nov.; a *Portulacaria afra* differt, multo maioribus foliis (30–80 mm × 30–55 mm) atque erecto florentique ramo, 3–5 m alto.

Typus: Cape Province—2817 (Tatasberg): Lower north slopes of mica-schist koppies, Dabimubrivier (-AA), 22/7/83, *van Jaarsveld and Kritzinger 7893* (NBG, holotype; PRE, WIND, K, isotypes).

Plant a rounded evergreen succulent shrub 500–700 mm tall when not in flower and 700 mm–1 m wide. *Branches* short, terete and thick, up to 35 mm in diameter, bearing conspicuous leaf scars; older branches woody, yellow-brown with bark peeling characteristically in horizontal papery flakes; flakes tough and slightly translucent; young branches softly succulent and grey-green, 9–12 mm in diam.; internodes 10–30 mm apart. *Leaves* fleshy, decussate, glaucous, obovate–ovate, 30–70 mm × 30–55 mm, base cuneate, apex rounded, margin slightly wavy; petiole short, 2–5 mm long *Flowering branch* terminal, erect, 3–5 m long, sparingly branched, herbaceous and snapping when bent; bracts leaf-like but smaller, 30 × 14 mm, often mucronate and soon deciduous; internodes 2–10 mm apart. *Inflorescences* borne laterally from the axils, 50–100 mm long. *Flowers* in dense fascicles (up to 10): pedicels 1,5 mm; sepals 2, broadly ovate and acute, 5

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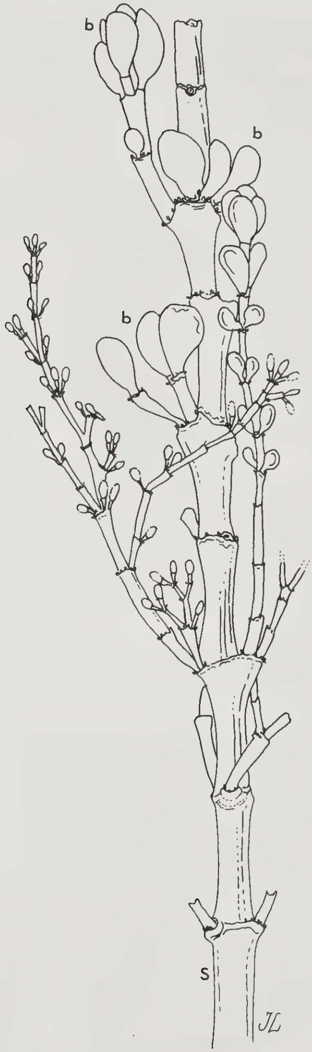

FIG. 1.
Portulacaria armiana van Jaarsveld, sp. nov. Inflorescence showing b: bracts; s: stem (life-size).

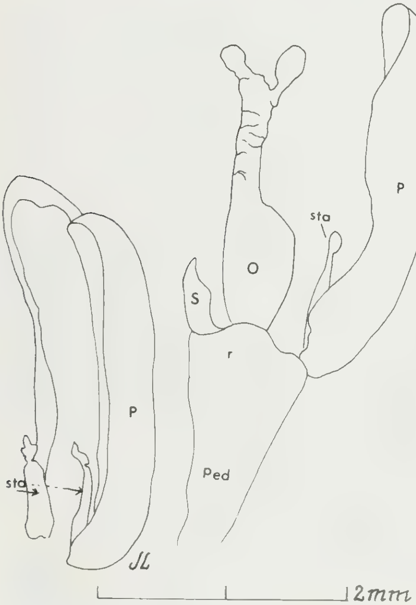

FIG. 2.
Portulacaria armiana van Jaarsveld, sp. nov. Flower showing o: ovary; p: petal; ped: pedicel; r: receptacle; s: sepal; sta: stamen.

mm long: receptacle conical, 1 mm wide; petals 5, 2,5–3 mm long, oblong and white, free to the base, hooded and obtuse at the apex; stamens 0,75–1 mm long, often aborted, (adnate to the) petals: pistil flask-shaped, 2 mm long, style branches 3, spreading; ovary obscurely 3-angled, approximately 1 mm in length.

Flowering period: July–October.

Distribution and habitat: *Portulacaria armiana* occurs in a very dry and remote part of the lower Gariep river valley in Namaqualand Broken Veld (Acocks Veld type no. 33). It is as yet only known from a single locality approximately 3 km north of Sandberg (northern Richtersveld) but it may be more widespread in adjacent areas. This spreading succulent shrub is a conspicuous feature of the north-facing mica-schist koppies and the plants found are scattered amongst rocks. It is associated with *Euphorbia virosa, E. gummiphora, Aloe dichotoma, A. gariepensis, Pachypodium namaquanum* and

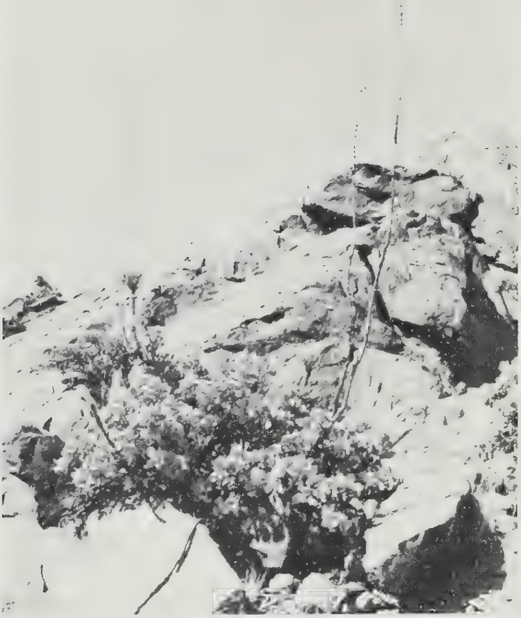

FIG. 3.
Portulacaria armiana van Jaarsveld, sp. nov. Plant in habitat north of Sandberg (southern Namib).

Ruschia schneideriana. There is a slight vegetative resemblance towards *Zygophyllum prismatocarpum* which occurs in nearby dry riverbeds. Rainfall is very low and precipitation, which mainly occurs in winter, ranges from 25–50 mm per annum and in some years no rain may fall.

DISCUSSION

Portulacaria armiana is a very distinct and remarkable species which has up until now escaped notice due to the arid, desolate and inhospitable terrain in which it occurs. This species is not closely related to the other two South African species, *P. afra* Jacq. and *P. pygmaeum* Pill., and is easily distinguished by its much larger leaves and tall single flowering branch which reaches a height of up to 5 m. Superficially it resembles a *Cotyledon* or large

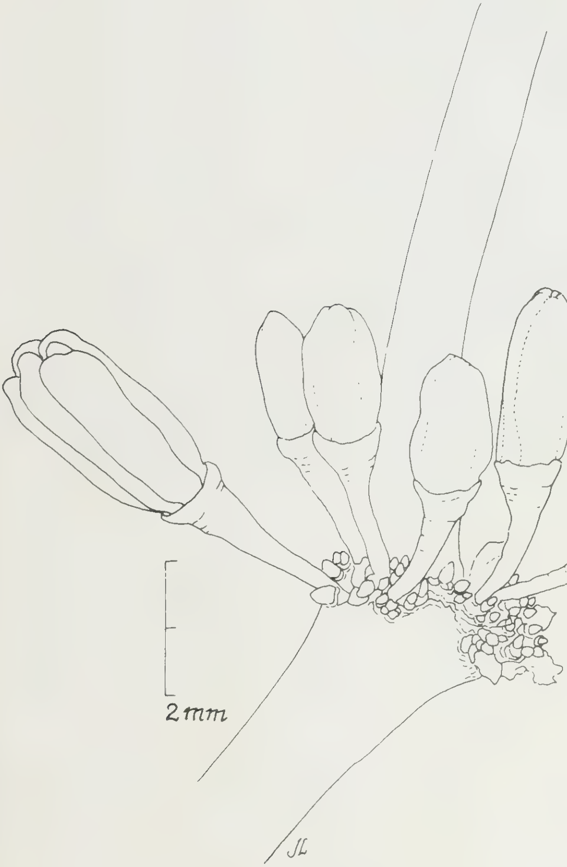

FIG. 4.
Portulacaria armiana van Jaarsveld, sp. nov. Flowering shoot showing flowers in dense fascicles.

Crassula species. The genus *Portulacaria* has an interesting distribution. *Portulacaria afra* occurs in the south east Cape and along the east coast, east of the Drakensberg escarpment to northern Transvaal. There is a large gap between the distribution of *Portulacaria afra* and the other two species from the Gariep centre of the west coast.

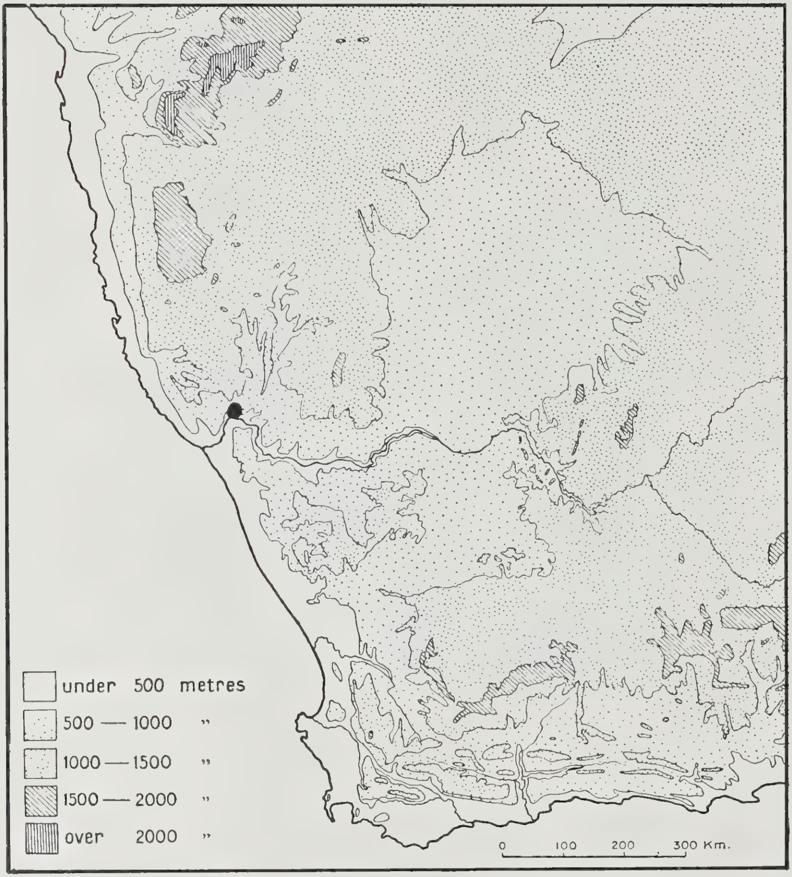

FIG. 5.
Distribution of *Portulacaria armiana* van Jaarsveld.

The new species is named after Mr. A. R. Mitchell, a botanist and a natural explorer specialising in succulents, who first came across this species. He noticed this strange "*Crassula*" with the tall flowering branch and later brought it to the attention of the author. In 1983 an expedition was arranged to investigate Mr. Mitchell's discovery. Mr Kobus Kritzinger, Curator of the Hester Malan Nature Reserve at Springbok, assisted the author in the search and the population was soon found. At first the author was puzzled as to what family this strange plant belonged but later, with the help of Dr Daryl Koutnik, of the University of Cape Town, it was found to be a species of *Portulacaria*.

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REFERENCE

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